

C. REMARKS

Applicants respectfully request reconsideration of the outstanding rejections and reexamination of the present application in light of the following amendments and remarks.

Status of the Claims

Claims 1-9 are pending in the application. Claims 10-25 are canceled.

In this Amendment, Applicants have canceled claims 10-25 from further consideration in this application. Applicant is not conceding that the subject matter encompassed by claims 10-25 prior to this Amendment is not patentable over the art cited by the Examiner. Claims 10-25 were cancelled in this Amendment solely to facilitate expeditious prosecution of allowable subject matter. Applicant respectfully reserves the right to pursue claims, including the subject matter encompassed by claims 10-25, as presented prior to this Amendment and additional claims in one or more continuing applications.

Claim Rejection – 35 USC 101

The Office Action rejects claim 19 under 35 USC 101 as allegedly directed to non-statutory subject matter. [Office Action, p. 2] Regardless of whether this rejection is correct, Applicants have canceled claim 19 in the present application, therefore the

Alleged Obviousness under 35 USC 103(a)

Claims 1-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Baker (US Patent 5,428,349) in view of Hoover (US Patent 6,209,102). [Office Action, p. 3] Claim 10-25 are canceled, therefore the rejection of these claims is no longer applicable in the present application. As to the rejection of claims 1-9, Applicants traverse the rejection of the pending claims.

As noted in the Office Action, under 35 USC §103(a) a patent may not be obtained though the invention is not identically disclosed as described as set forth in AUS920040101US1

section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. In *Graham v. John Deere*, the Supreme Court clarified that “under 103, in considering the obviousness or nonobviousness of the subject matter, the scope and content of the prior art are to be determined; differences between the prior art and the claims at issue are to be ascertained; and the level of ordinary skill in the pertinent art resolved, in addition to evaluating evidence of secondary considerations.” *Graham*, 383 U.S. 1, 148 USPQ 459 (1966).

The Examiner bears the initial burden of supporting any prima facie conclusion of obviousness. See *In re Rinehart*, 531, F.2d 1048, 189, USPQ 143 (CCPA 1976); *KSR International Co. v. Teleflex Inc.*, 82 USPQ2d 1385, 1396 (2007); MPEP 2142. The key to supporting a rejection under 35 USC 103 is the clear articulation of the reasons why the claimed invention would have been obvious; the analysis supporting a rejection under 35 USC 103 should be made explicit. See *KSR International Co.*, 82 USPQ2d at 1396; MPEP 2142 (Rev. 6, Sept. 2007).

Applicants traverse the rejection of claims 1-9. Applicants respectfully assert that the Office Action fails to establish a prima facie case of obviousness because the Office erred in the *Graham* factual findings and there is no clear articulation of the rationale supporting a conclusion of obviousness. Because the Office Action fails to establish a prima facie case of obviousness, Applicants respectfully request withdrawal of the rejection under 35 USC 103(a) and allowance of the claims.

Claim 1

Claim 1, as currently presented, reads:

Claim 1 (Previously Presented): A computer-implemented method for secure password entry, comprising:

displaying a password prompt comprising a changing stream of random characters, wherein a particular character within said changing stream of random characters is displayed at a visibly detectable higher frequency; and

receiving input to increment or decrement said particular character to reach a password character of a password.

Applicants respectfully assert that the Office has erred in finding a prima facie case of obviousness as to claim 1 because under a proper Graham analysis, when Baker and Hoover are considered as a whole, the references, do not teach the elements of claim 1 and there is no clear statement as to the rationale for one of ordinary skill in the art finding claim 1 as a whole obvious in view of the differences between Baker and Hoover and claim 1.

First, in the Graham inquiry, as to the scope and contents of Baker, the Office Action cites Figures 2-4 and the abstract of Baker as reading on the claimed element of a computer-implemented method for secure password entry. [Office Action, p. 3] The abstract of Baker describes:

"a password access method/algorithm is effected by generating a pseudorandom array of each letter of the alphabet and the numerals 0 and 9 such that the password entry can be monitored without disclosing the letters or numerals contained in the password. The preferred arrangement is a square matrix of six rows and six columns of characters. The user enters the password by selecting either the row or column containing each letter of a memorized password."

Figures 2 and 3 of Baker describe I/O displays of Figure 1 (Baker, col. 2, lines 24-28) and Figure 4 of Baker describes a flow diagram for the password entry algorithm of Baker (Baker, col. 3, lines 13-15). Thus Baker describes itself within the field of "password entry".

In addition, as to the scope and contents of Baker, the Office Action cites "8" in Figs. 2 and 3 as reading on the claimed element of displaying a password prompt comprising a changing stream of random characters. [Office Action, p. 3] "8" in Figs. 2 and 3, refers to the "thirty-six characters" including twenty-six letters of the alphabet plus the integers zero through nine. *Baker*, col. 2, lines 60-63. Baker describes an I/O device that "displays a random array of characters 8 consisting of six columns and six characters each." *Baker*, col. 2, lines 58-61. Col. 3, lines 28-44 and col. 4, lines 5-10 of Baker specify that for each letter of a password, the same thirty-six characters,

representing each letter of the alphabet and each number, are randomly ordered into an array and concurrently displayed together in a matrix of nine by four or six by six proportion. Thus, Baker describes concurrently displaying a different matrix of all 36 characters for each letter of a password.

Further, as to the scope and contents of Baker, the Office Action cites steps 22 and 23 in Figure 4 as describing "where array of alpha-numeric characters are displayed in a visibly detectable frequency" and describes this portion of Baker as reading on wherein a particular character within said changing stream of random characters is displayed at a visibly detectable higher frequency. [Office Action, p. 3] Step 22 in Figure 4 of Baker describes "generate random ordered alpha-numeric array of 0...9 and A...Z" and step 23 of Figure 4 of Baker describes "display random alpha-numeric array as NxM matrix of N rows and M columns." Within the specification of Baker, steps 22 and 23 of Figure 4 are described as "a pseudorandom algorithm is used 22 to randomly order the integers zero through nine and letters A through Z. The nature of the particular pseudorandom algorithm is important only to the extent that it has a nearly uniform distribution such that all the possible sequences of the alphanumeric characters occur with nearly equal likelihood" and "the randomly ordered characters are then displayed 23 in an N by M matrix where N times M is thirty-six. A six by six matrix is used in the preferred embodiment although a nine by four and four by nine matrix are other possible arrangements." *Baker*, col. 3, lines 15-32. Applicants respectfully submit that even without considering Baker in its entirety, it is clear from the portions of Baker cited that Baker describes generating an array of the same set of 36 different characters, for each password letter entry, and displaying the array of the same 36 different characters at the same time in a matrix. Baker's description of an algorithm that is "pseudorandom to the extent that it has a nearly uniform distribution such that all possible sequences of the alphanumeric characters occur with nearly equal likelihood" describes making sure that the same random array of the set of 36 different characters for concurrent display does not continue to be generated. Applicants respectfully submit that displaying a different random array of the same set of 36 different

characters in a matrix for each password letter entry as described in Baker does not describe "where array of alpha-numeric characters are displayed in a visibly detectable frequency" as claimed in the Office Action. In addition, as will be further discussed, concurrently displaying the same set of 36 different characters in a matrix does not teach any character that is displayed at a visibly detectable higher frequency.

The Office Action states that Baker does not explicitly teach receiving input to increment or decrement said particular character to reach a password character of a password. [Office Action, p. 3] The Office Action cites Hoover, figures 1 and 2, and for example col. 2, lines 36-63, as reading on receiving input to increment or decrement said particular character to reach a password character of a password. [Office Action, p. 3]

In considering the scope and content of Hoover, Hoover in general describes selecting a password by selecting one of multiple displayed fields containing characters, where if a hacker is tracking a user's keyboard or mouse entries, the hacker cannot determine a password selection from the keyboard or mouse based selections of fields. Hoover, abstract, col. 2, lines 6-9. Col. 2, lines 36-63 of Hoover read:

In yet another embodiment, shown in FIG. 1, a randomly initialized "bingo card" could be displayed, with the user entering the PIN by clicking on the correct character in each column of the bingo card. The current PIN could be displayable adjacent to the bingo card (FIG. 1) or the selected PIN characters could be highlighted on the bingo card. The current PIN could be displayable adjacent to the bingo card (FIG. 1) or the selected PIN characters could be highlighted on the bingo card, e.g. by changing the color or shading of the selected characters.

In still other embodiments, the user-selectable fields could be simply displayed as a series of character boxes, much like a crossword puzzle or fill-in-the blank game, with each field being initialized to an unpredictable alphanumeric character. For example, for a six-digit PIN, the system starts by displaying six random digits. To select his PIN, the user cursors through the digits. At each digit, he hits the up or down arrow key (to increment the digit by +1 or -1) an appropriate number of times until the desired digit appears.

Alternatively, as shown in FIG. 2, each particular, initially random PIN digit could be adjusted to the correct value by clicking on the corresponding "+" or "-" buttons.

Alternatively, two rows of digits could be used. One row could display an initially random PIN digit sequence. The user would input to an adjacent row an offset digit sequence such that the correct PIN digit sequence was formed when offset digit sequence row was added to the initially random PIN digit sequence row. The resulting correct PIN digit sequence could be displayed adjacent to the other two rows.

In addition, Figure 1 of Hoover describes an example where for each password character, multiple possible fields are displayed and a user clicks on one of the fields as the password character and Figure 2 of Hoover describes a user viewing a selected random number and then selecting an increment or decrement field to reach a password character. Thus, Hoover describes a user selecting a field that displays a character or the user entering input to increment or decrement a digit displayed in a field.

In considering the differences between Baker and Hoover and claim 1, Applicants note that a first difference between the references and claim 1 is neither Baker nor Hoover teach a **particular character** of the **changing stream of characters** displayed at a **visibly detectable higher frequency**, nor does the rejection of claim 1 address these elements. In particular, the Office Action cites Baker as reading on “where array of alpha-numeric characters are displayed in a visibly detectable frequency”, which does not address the claimed element of a particular character of the changing stream of characters displayed at a visibly detectable **higher** frequency. In addition, neither the Office Action nor Baker teaches any particular character that is included in a changing stream of characters or any particular character that is displayed at visibly detectable higher frequency within the changing stream of characters.

In addition, in considering the scope and contents of Baker, Applicants respectfully note that a prior art reference must be considered in its entirety, i.e. as a whole, including portions that would lead away from the claimed invention. *W.L. Gore & Associates, Inc., v. Garlock, Inc.*, 721 F.2d 1540, 220 USPQ 303 (Fed. Cir. 1983). When Baker is considered as a whole, it is clear Baker teaches away from the claimed element of a particular character in a stream of characters displayed at a visibly

detectable higher frequency. As a whole, Baker describes the importance of each possible character of the 36 different characters appearing in the matrix with equal probability. *Baker*, col. 2, lines 1-6. In particular, Baker describes that for each password letter to be selected, the same set of 36 different characters is displayed and the user only selects the row or column that displays the letter of the password, so that "since the successive characters of the memorized password appear with equal probability in columns or rows of the matrix, the actual columns or rows selected are most likely different each time the password is entered." *Baker*, col. 2, lines 1-6, col. 3, line 63- col. 4, line 19. Thus, Applicants submit that Baker's description of displaying the same set of 36 different characters for each password entry teaches away from any particular character being displayed at a visibly detectable higher frequency because displaying any single character at a visibly detectable higher frequency would allow an unauthorized user to more easily determine which character a user selects within a row or column, if that character also appeared in other rows or columns.

Thus, in view of Baker's description of a displayed array of a same set of 36 different characters displayed at a same frequency, a clear difference between Baker and Hoover and the claimed element of changing stream of random characters, wherein a particular character within said changing stream of random characters is displayed at a visibly detectable higher frequency, is that neither Baker nor Hoover separately or in combination teach a particular character within said changing stream of random characters displayed at visibly detectable higher frequency. In addition, a clear difference between Baker and Hoover and claim 1 is that Baker and Hoover both describe concurrently displaying a set of all possible characters for a password, but neither teach a displaying a password prompt comprising a changing stream of characters.

Second, in considering the differences between Baker and Hoover and the claimed element of receiving input to increment or decrement said particular character to reach a password character of a password, Applicants respectfully note that in considering claim 1 as a whole, the particular character displayed in the password

prompt at a higher frequency is the character within the changing stream that the user enters input to increment or decrement to reach a password character of a password. Thus, a difference between Baker and Hoover and claim 1 is that Baker describes a user selecting a row or column in which a character of a password is displayed and Hoover describes a user using keystrokes or a mouse selection to select one of multiple displayed fields containing a character or to increment or decrement a digit displayed in a field, therefore, clearly neither Baker nor Hoover separately or in combination describe a user providing inputs that would adjust the particular character displayed at a higher frequency within a random stream of characters. In particular, Baker and Hoover, separately or in combination, are different from claim 1 because Baker and Hoover do not teach that if in a random stream of characters displayed at a password prompt, the character "A" is displayed at a visibly detectable higher frequency than other characters in the stream and if the user enters input to increment, the character displayed at a higher frequency in the stream changes to "B".

Therefore, in view of the scope and content of Baker and Hoover and the differences between Baker and Hoover and claim 1, it is clear that the differences between Baker and Hoover and claim 1 are not such that claim 1 as a whole would have been obvious to one with skill in the art at the time of the invention. In particular, regardless of the Examiner's stated rationale for obviousness, it is clear that the gap between the prior art and claim 1 is so wide as to render the claims nonobvious to one of ordinary skill in the art. Clearly Baker only describes changing the order of a set of character concurrently displayed within an array of characters; Baker does not teach a changing stream of random characters or a changing stream of random characters with one of the characters displayed at a visibly detectable higher frequency. Hoover describes a user selecting to a field displaying a password character or incrementing or decrementing a character displayed in a field. It would not be obvious to one of ordinary skill in the art at the time of the invention to first modify Baker to teach changing an array of 36 characters concurrently displayed to instead teach a changing stream of characters displayed at a password prompt, to second modify Baker to teach one of the

characters to be displayed at a visibly detectable higher frequency in the changing stream of characters, and third to then modify Hoover's description of incrementing or decrementing the value of a digit in a field to instead teach incrementing or decrementing a particular character displayed at a higher frequency within a changing stream of characters.

As to the rationale stated in the Office Action for why claim 1 would have been obvious to one of ordinary skill in the art at the time the invention was made, the Office Action concludes that "it would have been obvious to a person having ordinary skill in the art at the time of Applicant's invention to combine the teachings of Hoover and Baker because both inventions are directed to a method of password entry system. One having ordinary skill in the art would be motivated to incorporate the input increment and decrement feature of Hoover into the password entry method of Baker in order to prevent an attacker from downloading keystrokes or character positions when an authorized user enters password to gain an access to a secured system." [Office Action, p. 3]

Applicants note that rejections on obviousness cannot be sustained by mere conclusory statements; instead there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness. *KSR International Co. v. Teleflex Inc.*, 82 USPQ2d 1385, 1396 (2007); MPEP 2141. In particular, because there are significant differences between Baker and Hoover and claim 1, including a lack of any teaching of a changing stream of random characters or a particular character within the changing stream displayed at a visibly detectable higher frequency, to establish a prima facie case of obviousness, the Office Action should include a clear articulation of a rationale for why, in view of the actual scope and content of Baker and Hoover and the differences between Baker and Hoover and claim 1, claim 1 would have been obvious to one of ordinary skill in the art at the time of the invention. *KSR*, 82 USPQ2d at 1396; MPEP 2141. The conclusory statement as to obviousness stated with regard to claim 1 does not clearly articulate why one of ordinary skill in the art at the time of invention would have found claim 1 obvious despite the fact that Baker and

Hoover do not teach at least one of the elements as taught in claim 1. As indicated by Applicants' comparison of the prior art as a whole with claim 1 as a whole, and the number and complexity of modifications required to reach claim 1 as a whole through the combination of the prior art, Applicants respectfully assert that a mere statement of a reason that a person of ordinary skill in the art might combine Baker and Hoover based on preventing an attacker from downloading keystrokes or character positions does not reach the level of articulated reasoning within some rational underpinning required to support the legal conclusion of obviousness required under 35 USC 101 and KSR International, and further does not clearly articulate any of the rationales stated in section 2100 of the MPEP as exemplary rationales. Because there is no clear and explicit articulated reasoning with a clear rationale underpinning to support the legal conclusion of obviousness, the Office Action fails to establish a prima facie case of obviousness as to claim 1.

Therefore, because a proper Graham factual findings indicate differences between Goal and Hyponnen and claim 1 and no clear articulation of the reasons why the claimed invention of claim 1 would have been obvious is provided, the Office erred in finding prima facie obviousness as to claim 1. MPEP 2141, IV. Because the Office fails to find prima facie obviousness as to claim 1, Applicants respectfully request withdrawal of the rejection under 35 USC 103(a) and allowance of the claims.

Claims 2-9

Applicants respectfully assert that because claim 1 is nonobvious under 35 USC 103(a), claims 2-9 which depend on claim 1 are also nonobvious and should be allowed. *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988).

Claim 2

In addition, Applicants respectfully assert that claim 2 is not obvious under Baker and Hoover. Claim 2 as originally presented reads:

Claim 2 (Original): The method according to claim 1 for secure password entry, further comprising:

displaying a plurality of character positions, wherein a stream of random characters is displayed in each of said plurality of character positions, wherein a particular position from among said plurality of character positions provides said password prompt.

Applicants respectfully assert that the Office has erred in finding a prima facie case of obviousness as to claim 2 because under a proper Graham analysis, when Baker and Hoover are considered as a whole, the references, do not teach the elements of claim 2 and there is no clear statement as to the rationale for one of ordinary skill in the art finding claim 2 as a whole obvious in view of the differences between Baker and Hoover and claim 2.

First, in the Graham inquiry, as to the scope and contents of Baker, the Office Action cites Figures 2-3 and col. 2, line 57-col. 3, line 12 of Baker as describing “where plurality of character positions of positions are displayed” and as reading on the claimed element of displaying a plurality of character positions, wherein a stream of random characters is displayed in each of said plurality of character positions and step 24 of Fig. 4 and col. 3, lines 12-44 of Baker as describing “where user selects a particular position” and as reading on wherein a particular position from among said plurality of character positions provides said password prompt. [Office Action, p. 5] The Office Action does not consider Hoover separately as to claim 2.

Second, in the Graham inquiry, as to the differences between Baker and Hoover and claim 2, Applicants respectfully assert that a clear difference between Baker and claim 2 is that Figures 2 and 3 of Baker describes a password prompt that includes, for each password character entry, a separate display of a matrix of a set of 36 different characters, where the user selects a row or column that includes the password character. Baker’s password prompt of a matrix of 36 characters and options for a user to select a row or column does not teach displaying multiple character positions, with a different stream of random characters in each position, with a particular position providing the password prompt.

In view of the differences between Baker and claim 2 and the lack of teaching stated by the Examiner in claim 1 as to a displayed password prompt in Baker,

Applicants respectfully assert that as to claim 2, establishing a prima facie case of obviousness requires an articulation of why in view of the differences between Baker and Hoover and claim 2, claim 2 as a whole would have been obvious under Baker and Hoover to one skilled in the art at the time of the invention.

Claim 5

In addition, Applicants respectfully assert that claim 5 is not obvious under Baker and Hoover. Claim 5 currently reads:

Claim 5 (Currently Amended): The method according to claim 1 for secure password entry, further comprising:
responsive to receiving input of a character selection input for selecting indicating that said particular character, selecting said particular character as said password character from among a plurality of separately selectable password characters of said password; and
responsive to receiving input of a password completion character indicating that said password is complete, securely passing each separately selected password character of said password to a requesting software layer.

Applicants note that claim 5 is amended to correct a typographical error, which is supported in the specification, therefore no new matter is added through the amendment to the claim.

Applicants traverse the rejection of claim 5 in view of the amendments to claim 5. The Office Action cites steps 27-31 of Baker as describing "where last element of the password is entered and access is either permitted or denied" and as reading on the element of responsive to receiving input of a password completion character indicating that said password is complete, securely passing said password to a requesting software layer. [Office Action, p. 5]

The differences between Baker and Hoover and claim 5 are clear. Baker only describes that when the user selects the last element of the password, a determination is made whether to permit or deny access. Claim 5, however, teaches an input of a character selection input for selecting each character of a password and a separate input of a password completion character to indicate that the password is complete.

Neither Baker nor Hoover teaches the password completion character of claim 5. In addition, neither reference teaches securely passing each separately selected password character to a requesting software layer.

Applicants respectfully submit that because Baker would need to be modified to teach a user entering a password completion character, separate from the user selecting a row or column for a password character and Baker would need to be modified to teach sending the selected characters to a requesting software layer, there must be some articulated reasoning for the required modifications and there must be some rational underpinning to support the legal conclusion of obviousness. *KSR International Co. v. Teleflex Inc.*, 82 USPQ2d 1385, 1396 (2007); MPEP 2141. Because Baker does not teach each of the claimed elements and there is no sufficient rationale stated to support a legal conclusion of obviousness in view of the differences between Baker and claim 5, Applicants respectfully assert that the Office Action fails to establish a prima facie case of obviousness as to claim 5 and the claim should be allowed.

Claim 8

Claim 8 is also not obvious under 35 USC 103(a) under Baker in view of Hoover. Claim 8, as originally presented, reads:

Claim 8 (Original): The method according to claim 1 for secure password entry, further comprising:
generating said stream of random characters, wherein said particular character is randomly selected.

Applicants respectfully assert that the Office has erred in finding a prima facie case of obviousness as to claim 8 because under a proper Graham analysis, when Baker and Hoover are considered as a whole, the references, do not teach the elements of claim 8 as a whole and there is no clear statement as to the rationale for one of ordinary skill in the art finding claim 8 as a whole obvious in view of the differences between Baker and Hoover and claim 8.

First, in the Graham inquiry, as to the scope and contents of Baker, the Office Action cites the abstract, Figures 2 and 3, step 23, and col. 1, line 55 to col. 2, line 10 of Baker as describing “where array of random characters are displayed” and as reading on generating said stream of random characters, wherein said particular character is randomly selected. [Office Action, p. 6] Applicants note, as previously discussed, that Baker as a whole describes displaying a matrix with a set of 36 different characters, concurrently displayed, for a user to select a column or row that includes a password character. To the extent that Baker describes random characters, as noted in the Office Action, Baker describes an array of random characters displayed, with Baker as a whole describing that the same 36 different characters, which are all possible characters of a password, are randomized within each iteration of the array of characters concurrently displayed.

Second, in the Graham inquiry, as to the differences between Baker and Hoover and claim 8, Applicants respectfully assert that in considering claim 8 as a whole, including the limitations of claim 1 upon which it depends, it is clear that claim 8 teaches said particular character which is randomly selected and which is displayed at a visibly detecting higher frequency. Applicants respectfully assert that a clear difference between Baker and claim 8 is that Baker describes randomizing the order in which the same set of 36 different characters are concurrently displayed in a matrix, which does not teach generating a stream of random characters or selecting a particular character in the stream of random characters to be displayed at a higher frequency. The specification of the present application provides an example of this “modified” stream of random characters, with one random character displayed at a visibly detectable higher frequency throughout, and for example, in paragraph 0018.

In viewing the scope and content of Baker and Hoover and the differences between Baker and Hoover and claim 8, Applicants respectfully assert that the differences are not such that claim 8 as a whole would have been obvious to one skilled in the art at the time of the invention. In particular, Applicants respectfully assert that there is gap between Baker’s description of displaying a matrix of a randomly ordered

array of a set of 36 different characters and the claimed elements of generating a stream of random characters modified with a particular character displayed at a visibly detectable higher frequency and the particular character randomly selected, that render the claim nonobvious to one with skill in the art.

Claim 9

Claim 9 is also not obvious under 35 USC 103(a) under Baker in view of Hoover. Claim 9, as originally presented, reads:

Claim 9 (Original): The method according to claim 1 for secure password entry, further comprising:
adjusting a frequency percentage at which said particular character is displayed in said stream of random characters.

Applicants respectfully assert that the Office has erred in finding a prima facie case of obviousness as to claim 9 because under a proper Graham analysis, when Baker and Hoover are considered as a whole, the references, do not teach the elements of claim 9 as a whole and there is no clear statement as to the rationale for one of ordinary skill in the art finding claim 9 as a whole obvious in view of the differences between Baker and Hoover and claim 9.

First, in the Graham inquiry, as to the scope and contents of Baker, the Office Action states that Baker fails to teach the elements of claim 9 of adjusting a frequency percentage at which said particular character is displayed in said stream of random characters, but the Office Action states that "Baker teaches displaying randomized alpha-numeric matrix array of characters at constant frequency" in Figures 2-3 and step 23. Applicants note again that Baker as a whole teaches displaying the alpha-numeric array of the set of 36 different characters randomized within a displayed matrix.

Second, in the Graham inquiry, as to the differences between Baker and claim 9, it is clear that Baker describes displaying the same set of 36 different characters for each password character entry and no portion of Baker describes displaying any particular character at a higher or lower frequency than any other character. In addition, as previously noted, Baker teaches away from a modification that would increase or

decrease the frequency of a particular character, because then an array may be displayed that does not include the password character or an array may be displayed that includes the password character on more rows or columns than 1, which would significantly increase a hacker's success in guessing which rows or columns contained the password character, even without having to track previous keystrokes. In contrast, claim 9 teaches adjusting the frequency percentage that the high frequency character is displayed in a changing stream of random characters at a password prompt, such that a hacker might be able to detect the high frequency character, but would still have to guess at incrementing or decrementing that character to the password character.

In viewing the scope and content of Baker and Hoover and the differences between Baker and Hoover and claim 8, Applicants respectfully assert that the differences are not such that claim 8 as a whole would have been obvious to one skilled in the art at the time of the invention. In particular, Applicants respectfully assert that there is a gap between Baker's description of displaying a randomized alpha-numeric matrix array of a set of 36 different characters "at constant frequency" and the claimed elements of adjusting a frequency percentage at which a particular character is displayed at a higher frequency, that requires significant modifications to reach, which renders the claim nonobvious to one with skill in the art.

Applicants note that rejections on obviousness cannot be sustained by mere conclusory statements; instead there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness. *KSR International Co. v. Teleflex Inc.*, 82 USPQ2d 1385, 1396 (2007); MPEP 2141. In particular, because there are significant differences between Baker and Hoover and claim 9, to establish a prima facie case of obviousness, the Office Action should include a clear articulation of a rationale for why, in view of the actual scope and content of Baker and Hoover and the differences between Baker and Hoover and claim 9, claim 9 would have been obvious to one of ordinary skill in the art at the time of the invention. *KSR*, 82 USPQ2d at 1396; MPEP 2141. The Office Action concludes that "it would have been obvious to a person having ordinary skill in the art at the time of Applicant's invention to modify the

system of Baker to display characters in an adjusted frequency percentage in order to enhance the password entry display unit, which would further discourage and confuse an attacker while eavesdropping". [Office Action, p. 6] As indicated by Applicants' comparison of the prior art as a whole with claim 9 as a whole, and Baker teaching away from the Examiner's proposed modification, Applicants respectfully assert that a mere statement of a reason that a person of ordinary skill in the art might combine Baker and Hoover based on discouraging and confusing an attacker while eavesdropping is not supported by Baker and does not reach the level of articulated reasoning within some rational underpinning required to support the legal conclusion of obviousness required under 35 USC 101 and KSR International. Because there is no clear and explicit articulated reasoning with a clear rationale underpinning to support the legal conclusion of obviousness, the Office Action fails to establish a prima facie case of obviousness as to claim 9.

Therefore, because a proper Graham factual findings indicate differences between Goal and Hyponnen and claim 9 and no clear articulation of the reasons why the claimed invention of claim 9 would have been obvious is provided, the Office erred in finding prima facie obviousness as to claim 1. MPEP 2141, IV. Because the Office fails to find prima facie obviousness as to claim 1, Applicants respectfully request withdrawal of the rejection under 35 USC 103(a) and allowance of the claims.

Conclusion

Applicants note the citation of pertinent prior art cited by the Examiner.

In view of the foregoing, withdrawal of the rejections and the allowance of the current pending claims is respectfully requested. If the Examiner feels that the pending claims could be allowed with minor changes, the Examiner is invited to telephone the undersigned to discuss an Examiner's Amendment.

No extension of time is believed to be necessary. If, however, an extension of time is required, the undersigned hereby authorizes the Commissioner to charge any fees for this extension to IBM Corporation Deposit Account No. 09-0447.

Respectfully submitted,

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